



UNITED STATES PATENT AND TRADEMARK OFFICE

nh
UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|---------------------|------------------|
| 10/678,654 | 10/02/2003 | Michael J. Miller | 027A.0001.U1(US) | 4091 |
| 29683 | 7590 | 03/07/2007 | EXAMINER | |
| HARRINGTON & SMITH, PC 4 RESEARCH DRIVE SHELTON, CT 06484-6212 | | | OSBERG, THUY THANH | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 2179 | |
| SHORTENED STATUTORY PERIOD OF RESPONSE | MAIL DATE | DELIVERY MODE | | |
| 3 MONTHS | 03/07/2007 | PAPER | | |

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

| | | |
|------------------------------|-------------------------|------------------|
| Office Action Summary | Application No. | Applicant(s) |
| | 10/678,654 | MILLER ET AL. |
| | Examiner Thuy Osberg | Art Unit 2179 |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 30 January 2007.
 2a) This action is **FINAL**. 2b) This action is non-final.
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-17, 19-30 and 32-57 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) Claim(s) _____ is/are allowed.
 6) Claim(s) 1-17, 19-30, 32-57 is/are rejected.
 7) Claim(s) _____ is/are objected to.
 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.
 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

| | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date: _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date: _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This communication is responsive to amendment filed 01/30/2007 to the original application filed 10/02/2003. **This action is made Final.**
 - A. Claims 1-17, 19-30 and 32-57 are pending in the application.
 - B. Claims 18 and 31 were cancelled.
 - C. Claims 1, 3, 5, 10, 12, 17, 20, 22 and 36 were amended.
 - D. Claims 46-57 were newly added.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. **Claims 1-2 and 43-45 are rejected under 35 U.S.C. 102(e) as being anticipated by Lee (US Patent 6,985,876).**

As claim 1, Lee discloses a method to at least specify, document and prototype an instrument having specific user interface elements to meet individual customer/market needs (abstract), comprising displaying, with a graphical user interface, an image of a customer-

selected instrument type (fig. 2B, label 34; col. 2, lines 22-29), the image shown in two dimensions and having a coordinate system (col. 7, lines 16-23, lines 50-55); enabling the customer to specify, with the graphical user interface, individual ones of a plurality of instrument parameters and horizontal and vertical locations thereof in the coordinate system (col. 7, lines 8-9, that the displayed image on a common display is in a 2 dimensional format and aligned via a coordinate system containing and "X" and "Y" axis) in a self-documenting fashion (fig. 2B, label 30 and col. 7, lines 13-23); in response to a selection of at least one type of instrument parameter, updating the displayed image to correspond to the selected instrument parameter (fig. 2B; col. 7, lines 16-23); and developing at least one prototype instrument for the customer based on the selected parameters and the self-documentation (fig. 2B, label 34; col. 7, lines 36-47; col. 7, lines 16-23).

As claim 2, Lee further teaches manufacturing an instrument based on the selected instrument parameters and the self-documentation (fig. 2A, label 22; col. 6, lines 10-13 and col. 7, lines 16-23).

As claim 43, Lee teaches an instrument comprising: a display for showing at least one user interface element (fig. 6, label 700; col. 9, lines 51-54); a memory (fig. 6, label 710 and 730; col. 9, lines 21-22); and an instrument controller that is coupled to said memory, to said display and to at least one instrument input (fig. 6, label 720 and 740; col. 9, lines 55-59), said memory storing data (fig. 6, label 730; col. 9, lines 26-30) for use by said instrument controller in mapping between said at least one instrument input and said at least one user interface element (col. 9, lines 60-64), where the data comprises data developed during an interactive design (fig. 2B; col. 7, lines 13-

15) process where there was displayed an image of a selected instrument type (fig. 2B, label 34; col. 2, lines 22-29) for enabling a potential customer to specify, through the use of a graphical user interface (col. 7, lines 2-7), at least one characteristic of the at least one user interface element (fig. 2B, label 32; col. 7, lines 36-39).

As claim 44, Lee further teaches where the data developed during the interactive design process (col. 7, lines 24-31) is suitable for use in obtaining at least one prototype sample of the instrument having the specified at least one characteristic of the at least one user interface element (fig. 2B, labels 32 and 34; col. 7, lines 36-47).

As claim 45, Lee further teaches where the at least one user interface element comprises a gauge (col. 3, lines 49-54).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. **Claims 5-7, 12-14, 20-21, 46, 48, 50, 53, 55-57 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lee in view of Kodosky et al. (US Pub 2004/0032433), hereinafter "Kodosky"**

As claim 5, Lee teaches a method to specify a gauge (abstract), comprising:

in response to a user accessing a server coupled to a network (fig. 1; col. 3, lines 35-43), displaying an image of a user-selected gauge type (fig. 2B, label 34; col. 2, lines 22-29) comprising a set of configurable gauge functions located at a plurality of location in the image (col. 7, lines 1-6);

displaying in association with the selected gauge type a set of visual aids corresponding to defined functions (col. 7, lines 2-5);

enabling the user to specify ones of the configurable gauge functions using said set of visual aids (col. 6, lines 63-67; col. 7, lines 1-7) and a drag and drop technique for selecting individual visual aids from the set of visual aids and associating a selected visual aid with a configurable gauge function (col. 7, lines 6-7);

and outputting a data file (col. 7, lines 24-31) for use in manufacturing at least one sample of the selected gauge type in accordance with the configurable gauge functions corresponding to the selected visual aids (fig. 2B, label 32; col. 7, lines 36-39).

Lee does not teach associating also associates the configurable gauge function with a defined function corresponding to the selected visual aid.

However, Kodosky teaches associating the configurable gauge function with a defined function corresponding to the selected visual aid (par [0078]). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Lee by

associating the configurable gauge function with a defined function corresponding to the selected visual aid as taught by Kodosky in order to provide an end product that is functional and operational based on the association in the visual aid.

As claim 6, Lee further teaches where the configurable gauge functions are located at fixed locations in the image (fig. 4; col. 6, lines 44-48).

As claim 7, Lee further teaches where the configurable gauge functions are located at user selected locations in the image (col. 6, lines 35-41).

As claim 12, Lee teaches a tool operable to enable a user to specify a gauge (abstract), comprising a graphical user interface for displaying an image of a user-selected gauge type (fig. 2B, label 34; col. 2, lines 22-29) comprising a set of configurable functions located at a plurality of location in the image (lines 1-6), for displaying in association with the selected gauge type a set of visual aids corresponding to defined functions (col. 7, lines 2-5) and for enabling the user to specify individual ones of the configurable gauge functions using said set of visual aids (col. 6, lines 63-67; col. 7, lines 1-7) with a drag and drop technique for selecting individual visual aids from the set of visual aids and associating a selected visual aid with a configurable gauge function (col. 7, lines 6-7), said tool being further operable for outputting a data file (col. 7, lines 24-31) for use in manufacturing at least one sample of the selected gauge type in accordance with the gauge functions corresponding to the selected visual aids (fig. 2B, label 32; col. 7, lines 36-39).

Lee does not teach associating also associates the configurable gauge function with a defined function corresponding to the selected visual aid.

However, Kodosky teaches associating the configurable gauge function with a defined function corresponding to the selected visual aid (par [0078]). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Lee by associating the configurable gauge function with a defined function corresponding to the selected visual aid as taught by Kodosky in order to provide an end product that is functional and operational based on the association in the visual aid.

As claim 13, Lee further teaches where the configurable gauge functions are located at fixed locations in the image (fig. 4; col. 6, lines 44-48).

As claim 14, Lee further teaches where the configurable gauge functions are located at user selected locations in the image (col. 6, lines 35-41).

As claim 20, Lee teaches a method to conduct business over a data communications network (abstract), comprising:

in response to a user accessing a server coupled to the network (fig. 1; col. 3, lines 35-43), displaying an image of a user-selected gauge type (fig. 2B, label 34; col. 2, lines 22-29) comprising a set of configurable functions located at a plurality of location in the image (lines 1-6); displaying in association with the selected gauge type a set of visual aids corresponding to defined functions (col. 7, lines 2-5); enabling the user to specify individual ones of the configurable gauge functions using said set of visual aids (col. 6, lines 63-67; col. 7, lines 1-7) and a drag and drop technique for selecting

individual visual aids from the set of visual aids and associating a selected visual aid with a configurable gauge function (col. 7, lines 6-7); outputting a data file (col. 7, lines 24-31) for use in custom engineering at least one sample of the selected gauge type, in accordance with the configurable gauge functions corresponding to the selected visual aids (fig. 2B, label 32; col. 7, lines 36-39); based at least on the output data file (col. 7, lines 24-31), custom engineering the at least one sample of the selected gauge type (fig. 2B, label 32; col. 7, lines 36-39); and manufacturing the custom engineered at least one sample for delivery to the user (fig 2B, label 34; col.7, lines 36-39).

Lee does not teach associating also associates the configurable gauge function with a defined function corresponding to the selected visual aid.

However, Kodosky teaches associating the configurable gauge function with a defined function corresponding to the selected visual aid (par [0078]). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Lee by associating the configurable gauge function with a defined function corresponding to the selected visual aid as taught by Kodosky in order to provide an end product that is functional and operational based on the association in the visual aid.

As claim 21, Lee further teaches where the data communications network is comprised of the Internet (fig. 1; col. 3, lines 35-43).

As claim 46, 48, 50 and 55, Lee does not teach the data file comprises a mapping data file configured to instruct a controller to map between gauge inputs and associated ones of the gauge functions.

However, Kodosky teaches the data file comprises a mapping data file configured to instruct a controller to map between gauge inputs and associated ones of the gauge functions (par [0197]; par [0198]). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Lee by the data file comprises a mapping data file configured to instruct a controller to map between gauge inputs and associated ones of the gauge functions as taught by Kodosky in order to provide an end product that is functional and operational based on the association in the data file (e.g., mapping).

As claim 53, Lee further teaches a method as in claim 20, wherein the data file forms part of a sample request (fig 2B, label 31; col. 7, lines 36-39), and wherein the method further comprise, prior to manufacturing:

at least one person approving or rejecting the sample request (col. 8, lines 17-22); and performing custom engineering and manufacturing in response to approving the sample request (col. 8, lines 17-22).

As claim 54, Lee further teaches a method as in claim 53, wherein: custom engineering further comprises determining that a level of customization by the user requires at least one of an overlay change, a software change, or a hardware change (col. 9, lines 20-31) and performing the at least one overlay change, software change, or hardware change in order to manufacture the at least one sample of the selected gauge type (fig. 2B; col. 7, lines 16-23); and manufacturing further comprises manufacturing the at least one sample based at least in part on the performed at least one overlay change, software change, or hardware change (fig. 2B, label 32; col. 7, lines 36-39; col. 8, lines 17-22).

As claim 56, Lee teaches a method (Abstract), comprising:

displaying a gauge face for a user-selected gauge type (fig. 2B, label 34; col. 2, lines 22-29), the gauge face shown in two dimensions (col. 7, lines 16-23, lines 50-55);
displaying, in association with the selected gauge type, a set of visual aids (col. 7, lines 2-5) at predetermined vertical and horizontal locations on the gauge face (lines 1-6), each of the visual aids corresponding to at least one potential gauge functions (col. 7, lines 6-7);
enabling a user to specify at least one of the potential gauge functions for each of the selected ones of the visual aids in the set (col. 6, lines 63-67; col. 7, lines 1-7);
outputting a data file (col. 7, lines 24-31) for use in manufacturing a sample of a gauge corresponding to the user-selected gauge type, the data file comprising data corresponding to the selected visual aids (fig. 2B, label 32; col. 7, lines 36-39);
and based at least on the output data file (col. 7, lines 24-31), manufacturing the sample of the gauge (fig. 2B, label 32; col. 7, lines 36-39) wherein a gauge face of the gauge comprises symbols corresponding to the visual aids (fig. 2B, label 34; col. 2, lines 22-29), each symbol presented on the gauge face at a horizontal and vertical location that corresponds to a corresponding visual aid and horizontal and vertical locations thereof in the coordinate system (col. 7, lines 8-9, that the displayed symbol is aligned via a coordinate system containing and "X" and "Y" axis).

Lee does not teach the associated specified gauge functions and locations on the gauge thereof and the gauge comprises a controller to provide the specified gauge functions corresponding to the symbols of the visual aids.

However, Kodosky teaches the associated specified gauge functions and locations on the gauge thereof (par [0078]) and the gauge comprises a controller to provide the specified

gauge functions corresponding to the symbols of the visual aids (par [0197]-[0198]). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Lee by having the associated specified gauge functions and locations on the gauge thereof and the gauge comprises a controller to provide the specified gauge functions corresponding to the symbols of the visual aids as taught by Kodosky in order to provide a standardized design with symbols the have functionality based on a control element.

As claim 57, Lee teaches a method (Abstract) a method, comprising:

displaying a gauge face for a user-selected gauge type (fig. 2B, label 34; col. 2, lines 22-29), the gauge face shown in two dimensions (col. 7, lines 16-23, lines 50-55);
displaying, in association with the selected gauge type, a set of visual aids (col. 7, lines 2-5), each of the visual aids corresponding to at least one potential gauge function (col. 7, lines 6-7);
enabling a user to place selected ones of the visual aids at horizontal and vertical locations chosen by the user (col. 6, lines 63-67; col. 7, lines 1-7);
enabling the user to specify at least one of the potential gauge functions for each of selected ones of the visual aids in the set (col. 6, lines 63-67; col. 7, lines 1-7);
outputting a data file (col. 7, lines 24-31) for use in manufacturing a sample of a gauge corresponding to the user-selected gauge type, the data file comprising data corresponding to the selected visual aids (fig. 2B, label 32; col. 7, lines 36-39);
and based at least on the output data file (col. 7, lines 24-31), manufacturing the sample of the gauge (fig. 2B, label 32; col. 7, lines 36-39), wherein a gauge face of the gauge comprises symbols corresponding to the visual aids (fig. 2B, label 34; col. 2, lines 22-29), each symbol presented on the gauge face at a horizontal and vertical location that corresponds to a

corresponding visual aid (col. 7, lines 8-9, that the displayed symbol is aligned via a coordinate system containing and "X" and "Y" axis.

Lee does not teach the associated specified gauge functions and locations on the gauge thereof and the gauge comprises a controller to provide the specified gauge functions corresponding to the symbols of the visual aids.

However, Kodosky teaches the associated specified gauge functions and locations on the gauge thereof (par [0078]) and the gauge comprises a controller to provide the specified gauge functions corresponding to the symbols of the visual aids (par [0197]-[0198]). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Lee by having the associated specified gauge functions and locations on the gauge thereof and the gauge comprises a controller to provide the specified gauge functions corresponding to the symbols of the visual aids as taught by Kodosky in order to provide a standardized design with symbols the have functionality based on a control element.

6. Claims 3-4, 10-11, 17, 19, 24 and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lee in view of Henson (US Patent 6,167,383).

As claim 3, Lee teaches method to specify a gauge (abstract), comprising: in response to a user accessing a server coupled to a data communications network (fig. 1; col. 3, lines 35-43), displaying an image of a user-selected gauge type (fig. 2B, label 34; col. 2, lines 22-29), the image shown in at least two dimensions (col. 7, lines 16-23, lines 50-55) and comprising a plurality of visual aids, the plurality of visual aids (col. 6, lines 63-67; col. 7, lines 1-7) placed at a plurality of vertical and horizontal locations in the image (col. 7, lines 8-9, that the displayed

image on a common display is in a 2 dimensional format and aligned via a coordinate system containing and "X" and "Y" axis).

Lee does not teach enabling the user to specify individual ones of gauge functions using a plurality of drop down menus.

However, Henson teaches enabling the user to specify individual ones of gauge functions using a plurality of drop down menus (fig. 3A, label 77; col. 9, lines 13-16). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Lee by enabling the user to specify individual ones of gauge functions using a plurality of drop down menus as taught by Henson in order to provide the customer with pre-selected available options through an easier to use design interface.

and in response to a selection of at least one type of gauge function for one of the visual aids (col. 7, lines 2-7), changing the displayed image to correspond to the selected gauge function (fig. 2B; col. 7, lines 16-23).

As claim 4, Lee further teaches preparing at least one sample of the selected gauge type in accordance with the selected gauge functions (fig. 2B, label 34; col. 7, lines 36-41).

As claim 10, Lee teaches a tool operable to specify a gauge, comprising a graphical user interface for displaying an image of a selected gauge type (fig. 2B, label 34; col. 2, lines 22-29), the image shown in at least two dimensions (col. 7, lines 16-23, lines 50-55) and comprising a plurality of visual aids (col. 6, lines 63-67; col. 7, lines 1-7), the plurality of visual aids placed at a plurality of vertical and horizontal locations in the image (col. 7, lines 8-9, that the displayed image on a common display is in a 2 dimensional format and aligned via a

Art Unit: 2179

coordinate system containing and "X" and "Y" axis) the graphical user interface further for enabling a user of the web tool (fig. 3; col. 6, lines 33-38).

Lee does not teach to specify individual ones of gauge functions of the visual aids using at least one drop down menu, further operable, in response to a selection of at least one type of gauge function for one of the visual aids.

However, Henson teaches to specify individual ones of gauge functions of the visual aids using at least one drop down menu (fig. 3A, label 77; col. 9, lines 13-16). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Lee by teach to specify individual ones of gauge functions using at least one drop down menu as taught by Henson in order to provide the customer with pre-selected available options through an easier to use design interface.

further operable, in response to a selection of at least one type of gauge function, to change the displayed image to correspond to the selected gauge function for one of the visual aids (fig. 2B; col. 7, lines 16-23).

As claim 11, Lee further teaches operable to send a data file (col. 7, lines 24-31) for use in preparing at least one sample of the selected gauge type in accordance with the selected gauge functions (fig. 2B, label 32; col. 7, lines 36-41).

As claim 17, Lee teaches a method to conduct business over a data communications network (abstract), comprising:
in response to a user accessing a server coupled to the network (fig. 1; col. 3, lines 35-43), displaying an image of a user-selected gauge type (fig. 2B, label 34; col. 2, lines 22-29), the image shown in at least two dimensions (col. 7, lines 16-23, lines 50-55) and comprising a

plurality of visual aids (col. 6, lines 63-67; col. 7, lines 1-7) , the plurality of visual aids placed at a plurality of vertical and horizontal locations in the image (col. 7, lines 8-9, that the displayed image on a common display is in a 2 dimensional format and aligned via a coordinate system containing and "X" and "Y" axis).

Lee does not teach enabling the user to specify individual ones of a plurality of gauge functions using a plurality of drop down menus.

However, Henson teaches specifying individual ones of a plurality of gauge functions using a plurality of drop down menus (fig. 3A, label 77; col. 9, lines 13-16). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Lee by specifying individual ones of a plurality of gauge functions using a plurality of drop down menus as taught by Henson in order to provide the customer with pre-selected available options through an easier to use design interface.

in response to a selection of at least one type of gauge function for one of the visual aid, changing the displayed image to correspond to the selected gauge function for providing the user with an image that corresponds to the selected gauge type having the selected gauge function (fig. 2B; col. 7, lines 16-23);

custom engineering at least one, sample of the selected gauge type, in accordance with the selected gauge functions (fig. 2B, label 32; col. 7, lines 36-39);

and manufacturing the custom engineered at least one sample for delivery to the user (fig 2B, label 34; col.7, lines 36-39).

As claim 19, Lee further teaches where the data communications network is comprised of the Internet (fig. 1; col. 3, lines 35-43).

As claim 51, (New) Lee further teaches a method as in claim 17, wherein the data file forms part of a sample request (fig 2B, label 31; col. 7, lines 36-39), and wherein the method further comprise, prior to manufacturing:

at least one person approving or rejection the sample request (col. 8, lines 17-22);

and performing custom engineering and manufacturing in response to approving the sample request (col. 8, lines 17-22).

As claim 52, Lee further teaches a method as in claim 51, wherein:

custom engineering further comprises determining that a level of customization by the user requires at least one of an overlay change, a software change, or a hardware change (col. 9, lines 20-31) and performing the at least one overlay change, software change, or hardware change in order to manufacture the at least one sample of the selected gauge type (fig. 2B; col. 7, lines 16-23);

and manufacturing further comprises manufacturing the at least one sample based at least in part on the performed at least one overlay change, software change, or hardware change (fig. 2B, label 32; col. 7, lines 36-39; col. 8, lines 17-22).

7. **Claims 8-9, 15-16, 22-23, 25-30, 32, 34-42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lee in view of Kodosky, and further in view of Motomiya.3**

As claim 8, Lee and Kodosky do not teach the configurable gauge functions are located at user selected locations in the image, and have a fixed size and shape.

However, Motomiya teaches the configurable gauge functions are located at user selected locations in the image (col. 6, lines 7-10), and have a fixed size and shape (col. 4, lines

63-67 and col. 5, lines 1-5). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Lee and Kodosky by locating the configurable gauge functions at user selected locations in the image as taught by Motomiya in order to ensure the gauge is designed utilizing the available fixed size and shapes to the users specifications.

As claim 9, Lee and Kodosky do not teach the configurable gauge functions are located at user selected locations in the image, and have at least one of a size and a shape selected by the user.

However, Motomiya teaches the configurable gauge functions are located at user selected locations in the image (col. 6, lines 7-10), and have at least one of a size (col. 4, lines 63-67) and a shape (col. 6, lines 4-7) selected by the user. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Lee and Kodosky by locating the configurable gauge functions at user selected locations in the image, and have at least one of a size and a shape selected by the user as taught by Motomiya in order to give the user the ability to design the gauge to their needs, by selecting the location, size and shape of the configurable gauge function.

As claim 15, Lee and Kodosky do not teach the configurable gauge functions are located at user selected locations in the image, and have a fixed size and shape.

However, Motomiya teaches the configurable gauge functions are located at user selected locations in the image (col. 6, lines 7-10), and have a fixed size and shape (col. 4, lines 63-67 and col. 5, lines 1-5). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Lee and Kodosky by locating the configurable

gauge functions at user selected locations in the image as taught by Motomiya in order to ensure the gauge is designed utilizing the available fixed size and shapes to the users specifications.

As claim 16, Lee and Kodosky do not teach the configurable gauge functions are located at user selected locations in the image, and have at least one of a size and a shape selected by the user.

However, Motomiya teaches the configurable gauge functions are located at user selected locations in the image (col. 6, lines 7-10), and have at least one of a size (col. 4, lines 63-67) and a shape (col. 6, lines 4-7) selected by the user. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Lee and Kodosky by locating the configurable gauge functions at user selected locations in the image, and have at least one of a size and a shape selected by the user as taught by Motomiya in order to give the user the ability to design the gauge to their needs, by selecting the location, size and shape of the configurable gauge function.

As claim 22, Lee teaches a method to design at least one user interface element of an instrument (abstract), comprising:

displaying an image of a selected instrument type (fig. 2B, label 34; col. 2, lines 22-29), the image shown in at least two dimensions (col. 7, lines 16-23, lines 50-55), at least one characteristic of the at least one user interface element (col. 7, lines 2-5).

Lee does not teach specifying, through the use of at least a drawing tool of a graphical user interface.

However, Kodosky teaches specifying, through the use of at least a drawing tool of a graphical user interface (par [0012]; par [0073]). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Lee by specifying, through the use of at least a drawing tool of a graphical user interface as taught by Kodosky in order to give the ability to design the gauge or change the available gauge shape or size to meet the users specifications.

Lee and Kodosky do not teach a blank instrument face and at least one characteristic of user interface element comprising a location a size and a functionality.

However, Motomiya teaches a blank instrument face (col. 4, lines 30-38) and at least one characteristic of user interface element comprising a location (col. 6, lines 7-10) a size (col. 4, lines 63-67) and a functionality (col. 6, lines 4-7). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Lee and Kodosky by displaying a blank instrument face and enabling a user to select at least a placement, a size and a functionality of the at least one user interface element as taught by Motomiya in order to provide the user the ability to design the gauge to their specification to meet their needs and to give the user the ability to design the gauge by selecting the location, size and functionality of the configurable gauge function.

in response to specifying the at least one characteristic, updating the displayed image to correspond to the specified at least one characteristic (Lee: fig. 2B; col. 7, lines 16-23); and developing an output data object (Lee: col. 7, lines 24-31) for use in obtaining at least one prototype sample of the instrument having the specified at least one characteristic of the at least one user interface element (Lee: fig. 4 and fig. 2B, labels 32 and 34; col. 7, lines 36-47).

As claim 23, Lee further teaches where specifying comprises using a drag and drop technique (col. 7, lines 6-7).

As claim 25, Lee and Motomiya do not teach using a drawing tool.

However, Kodosky teaches using a drawing tool (par [0012]; par [0073]). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Lee and Motomiya by using a drawing tool as taught by Kodosky in order to give the ability to design the gauge or change the available gauge shape or size to meet the users specifications.

As claim 26, Lee further teaches where at least a portion of the data object (col. 7, lines 24-31) is stored in the instrument (col. 9, lines 12-14) for use by a controller in controlling operation of the at least one user interface element (fig. 2B, label 32; col. 7, lines 36-39).

As claim 27, Lee further teaches where at least a portion of the data object (col. 7, lines 24-31) is stored in a non-volatile memory of the instrument (col. 4, lines 38-46) for use by an instrument controller in controlling operation of the at least one user interface element (fig. 2B, label 32; col. 7, lines 36-39).

As claim 28, Lee further teaches where at least a portion of the data object (col. 7, lines 24-31) is stored in a volatile memory of the instrument (col. 4, lines 38-46) for use by an instrument controller in controlling operation of the at least one user interface element (fig. 2B, label 32; col. 7, lines 36-39).

As claim 29, Lee further teaches where at least a portion of the data object (col. 7, lines 24-31) is stored in the instrument (col. 4, lines 38-46) for use by an instrument controller in mapping between at least one instrument input and the at least one user interface element (fig. 2B, label 32; col. 7, lines 36-39).

As claim 30, Lee and Motomiya do not teach using at least one tool.

However, Kodosky teaches using at least one tool (par [0012]; par [0073]). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Lee and Motomiya by using at least one tool as taught by Kodosky in order to provide the customer with an easy to use design interface.

Lee and Kodosky do not teach enabling a user to select at least a placement, a size and a functionality of the at least one user-interface element.

However, Motomiya teaches enabling a user to select at least a placement (col. 6, lines 7-10), a size (col. 4, lines 63-67) and a functionality of the at least one user interface element (col. 6, lines 4-7). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Lee and Kodosky by enabling a user to select at least a placement, a size and a functionality of the at least one user interface element as taught by

Motomiya in order to give the user the ability to design the gauge to their needs, by selecting the location, size and functionality of the configurable gauge function.

As claim 32, Lee further teaches where the instrument comprises a display (fig. 6, label 700; col. 9, lines 51-54), and where the data object is loaded into the instrument (col. 7, lines 24-31; col. 9, lines 12-14) for use by an instrument controller in displaying, in cooperation with the display, at least one specified user interface element (fig. 2B, label 32; col. 7, lines 36-39).

As claim 34, Lee and Kodosky do not teach re-sizing a displayed user interface element.

However, Motomiya teaches re-sizing a displayed user interface element (col. 4, lines 63-67). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Lee and Kodosky by re-sizing a displayed user interface element as taught by Motomiya in order to give the user maximum flexibility of the display screens and make a more user friendly working environment.

As claim 35, Lee and Motomiya do not teach changing an orientation of a displayed user interface element.

However, Kodosky teaches changing an orientation of a displayed user interface element (par [0149]; par [0152]). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Lee and Motomiya by changing an orientation of a displayed user interface element as taught by Kodosky in order to give the user maximum

flexibility of the display screens and make a more user friendly working environment.

As claim 36, Lee further teaches where specifying comprises changing a location of a the displayed user interface element (col. 6, lines 44-48).

As claim 37, Lee and Kodosky do not teach changing an aspect ratio of a displayed user interface element.

However, Motomiya teaches changing an aspect ratio of a displayed user interface element (col. 4, lines 63-67). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Lee and Kodosky by changing an aspect ratio of a displayed user interface element as taught by Motomiya in order to give the user maximum flexibility of the display screens and make a more user friendly working environment.

As claim 38, Lee and Kodosky do not teach changing a shape of a displayed user interface element.

However, Motomiya teaches changing a shape of a displayed user interface element (col. 6, lines 4-7). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Lee and Kodosky by changing a shape of a displayed user interface element as taught by Motomiya in order to give the user maximum flexibility of the display screens and make a more user friendly working environment.

As claim 39, Lee further teaches where the instrument comprises a gauge (col. 3, lines 49-54).

As claim 40, Lee further teaches where the display comprises a two dimensional array of separately addressable pixels (col. 9, lines 51-54).

As claim 41, Lee further teaches where the display comprises one of a liquid crystal display and a plasma display (col. 9, lines 51-54).

As claim 42, Lee further teaches where the instrument comprises a plurality of indicators and an overlay placed over the indicators, the overlay having areas selectively removed (col. 7, lines 2-5), and where the data object (col. 7, lines 24-31) is loaded into the instrument (col. 4, lines 38-46) for use by an instrument controller in displaying, in cooperation with the plurality of indicators and the overlay plurality of indicators and the overlay (col. 7, lines 2-5), the at least one specified user interface element (fig. 2B, label 32; col. 7, lines 36-39).

8. Claims 24 and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lee in view of Kodosky and Motomiya, and further in view of Henson.

As claim 24, Lee, Kodosky and Motomiya do not teach using a drop down menu technique.

However, Henson teaches specifying comprises using a drop down menu technique (fig. 3A, label 77; col. 9, lines 13-16). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Lee, Kodosky and Motomiya by specifying comprises using a drop down menu technique as taught by Henson in order to provide the customer with pre-selected options through an easier to use design interface.

As claim 33, Lee, Kodosky and Motomiya do not teach performing a validity check to ensure that the at least one characteristic that is specified is compatible with the functionality of the at least one user interface element.

However, Henson teaches performing a validity check to ensure that the at least one characteristic that is specified is compatible with the functionality of the at least one user interface element (col. 7, lines 57-61). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Lee, Kodosky and Motomiya by performing a validity check to ensure that the at least one characteristic that is specified is compatible with the functionality of the at least one user interface element as taught by Henson in order to ensure all the user selected gauge components/options are compatible and will function properly before making the purchase order.

Response to Arguments

9. Applicant's arguments filed 01/30/2007 have been fully considered but they are not persuasive. Therefore, rejected to claims 1-57 is maintained.

- a. Applicant argues as to claim 1, that there is no disclosure in any sections of Lee that displaying "an image of a customer-selected instrument type, the image shown in two dimensions and having a coordinate system; enabling the customer to specify, with the graphical user interface, individual ones of a plurality of instrument parameters and horizontal and vertical locations thereof in the coordinate system in a self-documenting fashion". For at least this reason, amended claim 1 is patentable over Lee. Because amended claim 1 is patentable, dependent claim 2 is patentable.**

In response, Examiner is not persuaded and not only respectfully submits that Lee specifically discloses "displaying an image of a customer-selected instrument type (fig

2B, label 34; col. 2, lines 22-29), the image shown in two dimensions and having a coordinate system (col. 7, lines 16-23, lines 50-55); enabling the customer to specify, with the graphical user interface, individual ones of a plurality of instrument parameters and horizontal and vertical locations (col. 7, lines 8-9, that the displayed image on a common display is in a 2 dimensional format and aligned via a coordinate system containing and "X" and "Y" axis) thereof in the coordinate system in a self-documenting fashion (fig. 2B, label 30 and col. 7, lines 13-23)", but also it would have been obvious to one skilled in the art at the time of the invention.

b. Applicant argues as to claims 5-7, 12-14, 20 and 25, that Lee, col. 6, line 60 to col. 7, line 7. First, the extent of the "other" drag and drop techniques in Lee is not defined whatsoever. Second, in claim 5, the drag and drop technique serves two purposes: (1) it selects individual visual aids from the set of visual aids; and (2) it associates a selected visual aid with a configurable gauge function. Even if Lee meets (1) (which Applicants do not admit), there is no indication in Lee that a drag and drop technique would serve the purpose of associating a selected visual aid with a configurable gauge function. There is no indication in Lee that a drag and drop technique would serve the purpose of associating a selected visual aid with a configurable gauge function. For at least this reason and the fact that the extent of the "other" drag and drop techniques in Lee is not defined, amended claim 5 is patentable over Lee. Because amended claim 5 is patentable, amended claims 12 and 20 are also patentable. Because claims 5, 12, and 20 are patentable, their respective dependent claims 6, 7, 13, 14, and 21-23 are also patentable.

In response, Examiner is not persuaded and respectfully submits that to one skilled in the art, Lee specifically discloses in column 6, lines 60 to column 7, line 7, that "other drag and drop techniques" which inherently can be used to configure a component based on visual aids. In regards to claims, 5, 12, 20 are unpatentable, which makes dependent claims 6, 7, 13, 14 and 21-23 unpatentable.

c. Applicant argues that Claims 17 and 20 have been amended as follows. Claim 17 now recites "custom engineering at least one sample of the selected gauge type, in accordance with the selected gauge functions" and "manufacturing the custom engineered at least one sample for delivery to the user." Claim 21 now recites "based at least on the output data file, custom engineering the at least one sample of the selected gauge type" and "manufacturing the custom engineered at least one sample for delivery to the user." These amendments are supported, e.g., by FIG. 5 and page 11, lines 20-25. There is no disclosure of this added subject matter in claims 17 and 20 in any of the cited references.

Examiner is not persuaded and respectfully submits that claim 17 is rejected as above, based on the fact that Lee discloses "custom engineering at least one sample of the selected gauge type, in accordance with the selected gauge functions (fig. 2B, label 32; col. 7, lines 36-39)" and "manufacturing the custom engineered at least one sample for delivery to the user (fig 2B, label 34; col. 7, lines 36-39)" As to claim 21, Lee directly

teaches "based at least on the output data file, custom engineering the at least one sample of the selected gauge type" and "manufacturing the custom engineered at least one sample for delivery to the user". Furthermore to one skilled in the art and incorporating the teachings of Lee that sending the data to the server and returning a visually depicted object for ordering by the user.

d. **Applicant argues that** amended claim 22 is patentable. It is noted that the Applicants have added subject matter similar to the subject matter in canceled claim 31 to claim 22. The Examiner rejected claim 31 as being unpatentable over rejected claims 30 and 31 under 35 U.S.C. § 103(a) as being unpatentable over Lee in view of Kodosky and in further view of Motomiya. First, there is no indication in Lee that the components used to create a customizable product in Lee could have specified a location, a size, and a functionality of a component. There is absolutely no teaching or implication in Lee that a size of a component could be specified. Nor is there any teaching or implication that functionality of the component could be specified. In other words, in Lee, the component already has a predetermined functionality and a user simply selects the component as part of a product. The same arguments are also valid for Kodosky. Given that the combination of Lee and Kodosky does not disclose or imply enabling a user to select placement, size, and functionality of a user interface element, then one skilled in the art would not look to Motomiya to add the ability for a user to select placement, size, and functionality of a user interface element, as such an ability is unnecessary for the combination of Lee and Kodosky (or these separately). Applicants respectfully submit that this cited text has little or nothing to do with enabling a user to select functionality of a user interface element of an instrument such as a gauge. Therefore, Motomiya does not disclose "specifying at least one characteristic of the at least one user interface element, the at least one characteristic comprising a functionality" as recited in claim 22, and therefore the combination of Motomiya, Lee, and Kodosky does not disclose this subject matter. For at least these reasons, amended claim 21 is patentable over the (invalid) combination Motomiya, Lee, and Kodosky. Because claim 21 is patentable, its dependent claims 23, 26-29, 32, 36, 39-42 are also patentable.

In response, Examiner is not persuaded and respectfully submits that claim 22 is rejected based on the fact that combined teachings of Lee, Kodosky and Motomiva specifically teach and further understood by one skilled in the art at the time of the invention that a user could specify a location (Motomiya: col. 6, lines 7-10), size (Motomiya: col. 4, lines 63-67) and functionality (Motomiya: col. 6, lines 4-7) of the component. Examiner stands by her statements that further known by ones skilled in the art at the time of the invention to provide the user the ability to design the gauge to their specification to meet their needs and to give the user the ability to design the gauge by selecting the location, size and functionality of the configurable gauge function. There for dependent claims 23, 26-29, 32, 36, 39-42 are also unpatentable along with claim 21.

e. **Applicant argues that** in other words and paraphrasing, the display shows a user interface element. The data in the memory is used for mapping between an interface

input and the user interface element. The data was developed during an interactive design process where there was an image displayed and the process enabled the customer to specify a characteristic of the user interface element.

The Examiner cites the CRT/Video monitor 700 of Lee as disclosing “a display for showing at least one user interface element”. However, there is no indication in Lee that the CRT Video monitor 700 displays a user interface element, as such a term is defined in the specification and the claims. For instance, one such example of a user interface element is a gauge (see claim 45).

Applicants respectfully submit that Lee does not disclose, as recited in independent claim 43, an instrument including “a display for showing at least one user interface element”, “an instrument controller that is coupled to said memory, to said display and to at least one instrument input, said memory storing data for use by said instrument controller in mapping between said at least one instrument input and said at least one user interface element [suitable for showing on the display of the instrument” and where “the data comprises data developed during an interactive design process where there was displayed an image of a selected instrument type for enabling a potential customer to specify, through the use of a graphical user interface, at least one characteristic of the at least one user interface element.” For at least these reasons, claim 43 is patentable over Lee. In independent claim 43-(paraphrasing), the instrument comprises a memory. The memory stores data for use by said instrument controller in mapping between an instrument input and a user interface element, which can be displayed on the display of the instrument. The Examiner cites an operating system for purported disclosure of this data, but an operating system does not map between an instrument input and a user interface elements displayed on the display of the instrument, where ‘the data itself is developed during an interactive design process. In Lee, the operating system is not developed during an interactive design process and does not map between an instrument input and a user interface element displayed on the display of the instrument. Therefore, independent claim 43 is patentable over Lee. As independent claim 43 is patentable over Lee, its dependent claims 44 and 45 are patentable over Lee.

In response, Examiner is not persuaded and respectfully submits that to one skilled in the art, Lee specifically discloses “a display for showing at least one user interface element (fig. 6, label 700; col. 9, lines 51-54)”, “an instrument controller that is coupled to said memory, to said display and to at least one instrument input, said memory storing data for use by said instrument controller in mapping between said at least one instrument input (fig. 6, label 720 and 740; col. 9, lines 55-59) and said at least one user interface element (col. 9, lines 60-64) suitable for showing on the display of the instrument (fig. 2B, label 34; col. 2, lines 22-29)”. Therefore, Lee does in fact teach a user interface element (software), which is stored in the memory that contains mapping information between instrument input and the interface element.

- f. Amended claim 3.** *It is respectfully submitted that Lee, Henson, or the combination of Lee and Henson does not disclose at least “displaying an image of a user-selected gauge type, the image shown in at least two dimensions and comprising a plurality of visual aids, the plurality of visual aids placed at a plurality of vertical and horizontal locations in the image” and “enabling the user to specify individual ones of gauge*

functions of the visual aids using a plurality of drop down menus". Applicant argues that Consequently, claim 3 is patentable over the combination of Lee and Henson. Similar arguments can be made for amended claims 10 and 17, and these claims are also patentable over the combination of Lee and Henson. Because claims 3, 10, and 17 are patentable, dependent claims 4, 11, 18, and 19 are also patentable.

With regard to claims 24, and 33, these claims depend from independent claim 22, which was shown above to be patentable. Therefore, dependent claims 24 and 33 are patentable for at least the reasons given above with respect to independent claim 22.

Rejections to Claims 8, 9, 15, 16, 25, 30, 31, 34, 35, 37, and 38. Applicant argues that Claims 8 and 9 are dependent from claim 5, which was shown above to be patentable. Claims 15 and 16 depend from claim 12, which was shown above to be patentable.

Claims 25, 30, 31, 34, 35, 37, and 38 depend from claim 22, which was shown above to be patentable. Therefore, claims 8, 9, 15, 16, 25, 30, 31, 34, 35, 37, and 38 are patentable for at least the reasons given above

In response, Examiner is not persuaded and respectfully submits that to one skilled in the art, Lee specifically discloses "displaying an image of a user-selected gauge type (fig. 2B, label 34; col. 2, lines 22-29), the image shown in at least two dimensions (col. 7, lines 16-23, lines 50-55) and comprising a plurality of visual aids (col. 6, lines 63-67; col. 7, lines 1-7), the plurality of visual aids placed at a plurality of vertical and horizontal locations in the image (col. 7, lines 8-9, that the displayed image on a common display is in a 2 dimensional format and aligned via a coordinate system containing an "X" and "Y" axis)" and then incorporating the teaching of Henson who specifically teaches "enabling the user to specify individual ones of gauge functions of the visual aids using a plurality of drop down menus (Henson: fig. 3A, label 77; col. 9, lines 13-16)". The combination of these teachings together forms the concept of the invention and in order to provide the customer with pre-selected available options through an easier to use design interface. Therefor applicants argument has been noted and amended claims 10 and 17 with dependent claims 4, 11, 18, and 19 are rejected as stated above.

g. Applicant argues that consequently, claim 3 is patentable over the combination of Lee and Henson. Similar arguments can be made for amended claims 10 and 17, and these claims are also patentable over the combination of Lee and Henson. Because claims 3, 10, and 17 are patentable, dependent claims 4, 11, 18, and 19 are also patentable.
With regard to claims 24, and 33, these claims depend from independent claim 22, which was shown above to be patentable. Therefore, dependent claims 24 and 33 are patentable for at least the reasons given above with respect to independent claim 22.
Rejections to Claims 8, 9, 15, 16, 25, 30, 31, 34, 35, 37, and 38. Applicant argues that Claims 8 and 9 are dependent from claim 5, which was shown above to be patentable. Claims 15 and 16 depend from claim 12, which was shown above to be patentable.
Claims 25, 30, 31, 34, 35, 37, and 38 depend from claim 22, which was shown above to be patentable. Therefore, claims 8, 9, 15, 16, 25, 30, 31, 34, 35, 37, and 38 are patentable for at least the reasons given above

In response, Examiner has noted the applicant's arguments and is not persuaded and respectfully submits that all claims (independent or dependent) are rejected as stated above.

h. Applicant's arguments with respect to claims 46-57 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

10. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a). A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thuy Osberg whose telephone number is 571-270-1258. The examiner can normally be reached on Monday-Friday (8:30AM-5:00PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Weilun Lo can be reached on 571-272-4847. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications

Art Unit: 2179

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

TTO

BA HUYNH
PRIMARY EXAMINER